



EVE AIR MOBILITY PRESENTS VECTOR AND PROVIDES UPDATES ON URBAN ATM SOFTWARE DEVELOPMENT

News / Manufacturer



Eve Air Mobility released Urban Air Traffic Management software and provided updates on the solution’s development. Vector will be an agnostic software solution designed to safely address the unique air traffic and network management challenges of current and future AAM operations, focusing on fleet and vertiport operators, and future service providers for AAM, including Air Navigation Service Providers. The company is advancing towards an operational version of the software which customers can test and trial to help progress the market.

Johann Bordais, Eve’s CEO commented: “eVTOL aircraft flights will become an established transportation mode for communities worldwide. Eve expects first deliveries and entry into service as soon as 2026 and has been addressing the airspace and Air Traffic Management (ATM) challenges to support the introduction and growth of the market in a harmonized and safe way. Vector will streamline AAM operations from day 1, coordinating all stakeholders involved to enhance safety, optimize performance, and maximize resource usage.”

Vector will allow eVTOLs to be integrated with other aircraft flying in low-level urban airspace from day 1 of operations and provide the automation needed to enable UAM market scalability. To date, Eve has 14 customers for the solution, including fleet operators, vertiports and airspace and flow

management providers. With Vector, eVTOL operators will make their operations more efficient; vertiports will manage resource availability with all operation stakeholders involved; and ANSPs and Providers of Services for UAM will optimize the airspace and air traffic network for all users.



Back in November 2023, Eve partnered with Flexjet to conduct a simulation to validate and refine Vector capabilities under real-scenario conditions and better understand the software's commercial viability and applications. The simulation took place in the UK and involved 18 flights across eight aerodromes, exercising 26 different routes with alternative landing locations to test the standby flight plan functionality. The team also tested delays at departure and destination with impacts on incoming flights, flight cancellations due to airspace and weather constraints, and in-flight emergencies, including alternative landing location requests.

Eve-Flexjet simulation has found gaps between current ATM systems and those required to support UAM operations from Day 1, such as the lack of integration between fleet and vertiport operator systems to coordinate eVTOL flights safely and efficiently. Therefore, Eve is prioritizing the development of services that address these gaps, including integrated flight planning with airspace and vertiport resource availability; management of alternate landing locations built into the flight planning to support the endurance limitations of electric aircraft; and conformance management to inform stakeholders when flights deviate from their plan and may affect other flights.

Brenden Hedblom, Eve's head of traffic management solutions said: "Flight dispatchers are responsible for nearly all aspects of an operation, which requires extensive decision-making and tracking abilities. Urban ATM services can support these activities in preparation for AAM operations through increased levels of automation and an integrated view of the relevant information tied to a specific flight. Eve has been actively incorporating features, including feedback received through user testing, into Vector to ensure the value of its services translates directly to the end users."

As Vector matures, Eve continues to pursue additional opportunities to trial the solution with its customers and partners. Testing it in real-world scenarios is the best way to ensure the services provide optimal value. The company expects this year to advance towards an operational version of the software which customers can test and trial to help advance the market and prepare the

UAM ecosystem for initial operations.



19 MARCH 2024

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